

AD-A100 445 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19304 MLRS MISSILE NUMBER 001, ROUND NO. V134/MD-1, 17 APRIL 19--ETC(U)
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April 1981

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(9) METEOROLOGICAL DATA REPORT

19304 MLRS
Missile 001
Round No. V134/MD-1,
17 April 1981,

By

Donald C. Keller AV 258-3909
Programs Coordinator
WS Meteorological Team

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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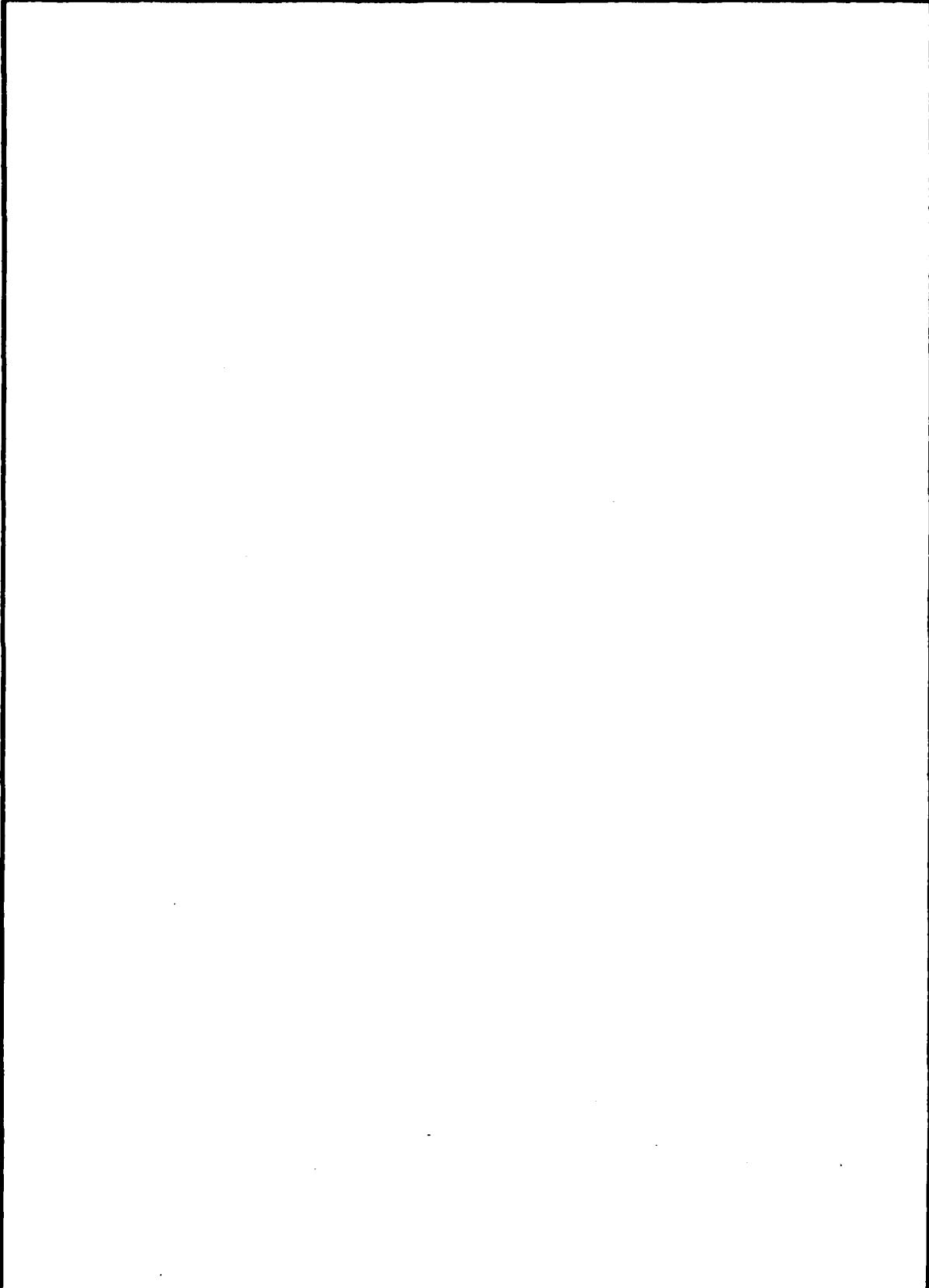
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Dr 1172 ✓	2. GOVT ACCESSION NO. AD-A100 445	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 19304 MLRS Missile No. 001 Round No. V134/MD-1	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) White Sands Meteorological Team	6. PERFORMING ORG. REPORT NUMBER DA Task 1F665702D127-02	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002	12. REPORT DATE 17 April 1981	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783	13. NUMBER OF PAGES 30	
16. DISTRIBUTION STATEMENT (of this Report)	15. SECURITY CLASS. (of this report)	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 19304 MLRS, Missile No. 001, Round No. V134/MD-1, presented in tabular form.		

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CONTENTS

INTRODUCTION-----	1
DISCUSSION-----	1
MAP-----	2
TABLES	
1. Surface Observation taken at 0939 MST at LC-33-----	3
2. Anemometer-Measured Wind Speed and Direction, Lc-33 Fixed Pole, taken at 0939 MST-----	4
3. Anemometer-Measured Wind Speed and Direction, Tower Levels 1, 2, 3, and 4, taken at 0939 MST-----	4
4. T-Time Pilot Balloon Measured Wind Data at LC-33 and NICK Site at 0939 MST-----	5
5. Aiming and T-Time Computer Met Messages-----	6
6. LC-37 Significant Level Data at 0530 MST-----	7
7. LC-37 Upper Air Data at 0530 MST-----	8
8. LC-37 Mandatory Levels at 0530 MST-----	10
9. WSD Significant Level Data at 0630 MST-----	11
10. WSD Upper Air Data at 0630 MST-----	12
11. WSD Mandatory Levels at 0630 MST-----	14
12. LC-37 Significant Level Data at 0730 MST-----	15
13. LC-37 Upper Air Data at 0730 MST-----	16
14. LC-37 Mandatory Levels at 0730 MST-----	18
15. WSD Significant Level Data at 0830 MST-----	19
16. WSD Upper Air Data at 0830 MST-----	20
17. WSD Mandatory Levels at 0830 MST-----	22
18. WSD Significant Level Data at 0930 MST-----	23
19. WSD Upper Air Data at 0930 MST-----	24
20. WSD Mandatory Levels at 0930 MST-----	26

INTRODUCTION

19304D MLRS _____, Missile Number 001, Round Number V134/MD-1, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0939 MST on 17 April 1981. The scheduled launch time was 0930.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 met site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Single Theodite observations at:

SITE AND ALTITUDE

LC-33	720 Meters
NICK	1560 Meters

(b) Air structure data (rawinsonde) were collected at the following met sites.

SITE AND TIME

LC-37	0530 MST
WSD	0630 MST
LC-37	0730 MST
WSD	0830 MST
WSD	0930 MST

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Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Avail and/or	
Dist	Special
A	

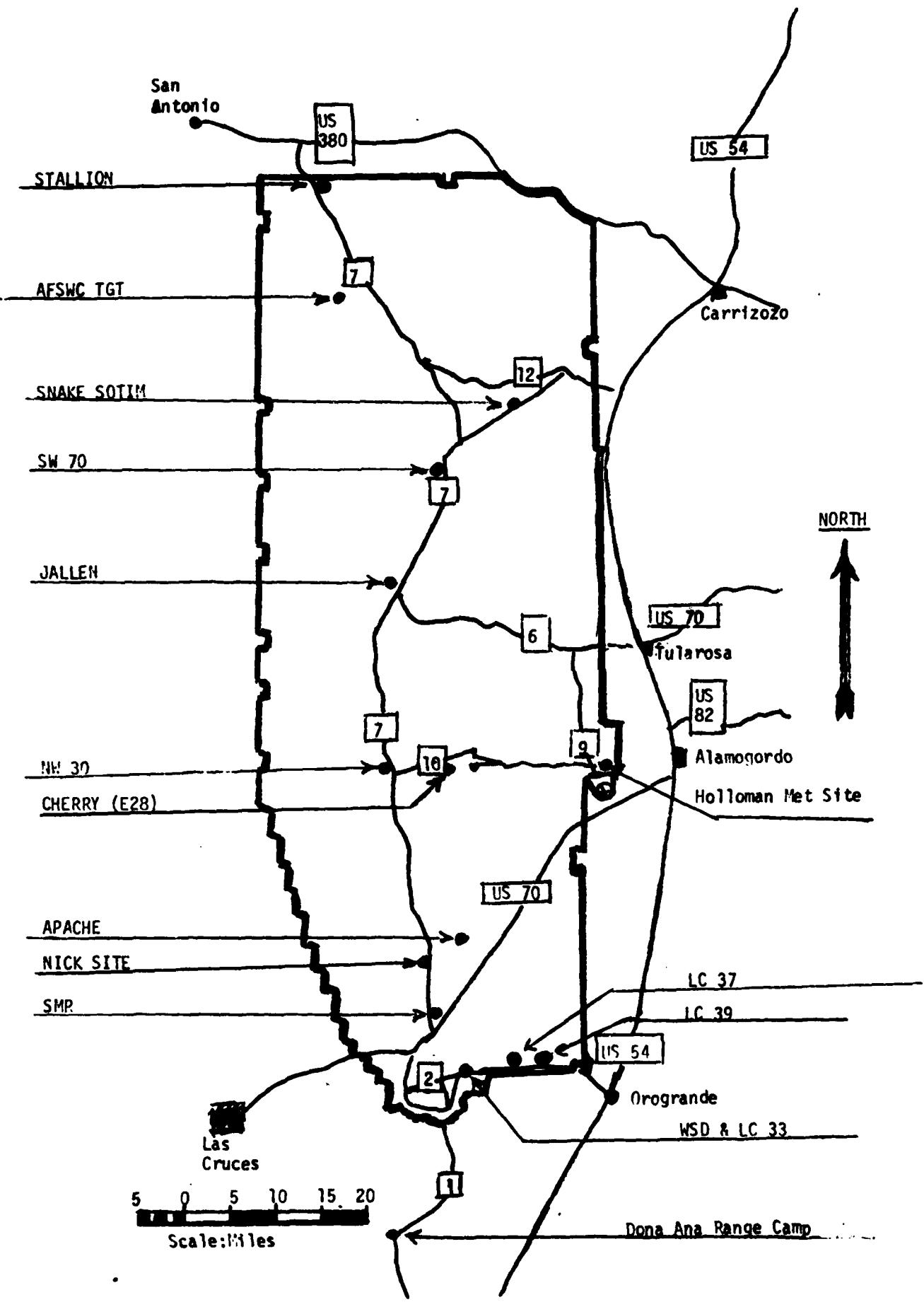


TABLE 1. Surface Observations taken at 0939 MST,
17 April 1981, at LC-33, 19304 MLRS,
Missile Number 001, Round Number V134/MD-1.

ELEVATION	3983	FT/MSL
PRESSURE	883.8	MBS
TEMPERATURE	17.0	°C
RELATIVE HUMIDITY	71	%
DEW POINT	11.6	°C
DENSITY	1052	GM/M ³
WIND SPEED	02	KTS
WIND DIRECTION	150	DEGREES
CLOUD COVER	10/AS	AMT/TYPE

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS
Taken at 0939 MST.

POLE #1			POLE #2			POLE #3		
X485,874.29			X485,874.93			X485,877.29		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T30	141	01	T-30	150	01	T-30	145	01
T-20	138	02	T-20	143	01	T-20	145	02
T-10	138	02	T-10	143	01	T-10	145	01
T0.0	120	01	T0.0	142	01	T0.0	145	01
T+10	119	02	T+10	138	01	T+10	145	02

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	142	03	T-30	145	05
T-20	150	03	T-20	151	04
T-10	150	02	T-10	149	04
T0.0	150	02	T0.0	149	04
T+10	150	02	T+10	148	03

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	140	04	T-30	147	05
T-20	139	02	T-20	147	04
T-10	139	02	T-10	144	04
T0.0	139	03	T0.0	144	03
T+10	139	03	T+10	140	03

TABLE 4

T-TIME PILOT-BALLOON MEASURED WIND DATA

LC33 0939 MST
 WSTM COORDINATES:
 X= 486,037.24
 Y= 182,350.16
 H= 3977.30

NICK 0939 MST
 WSTM COOORDINATES:
 X= 470,734.56
 Y= 255,775.64
 H= 4126.57

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	150	02	SURFACE		CALM
60		MISG	60	017	02
120		MISG	120	017	03
180	274	03	180	025	02
240	235	01	240	110	01
300	325	04	300	184	01
360	340	04	360	197	02
420	033	03	420	204	03
480	008	04	480	207	03
540	351	04	540	209	02
600	280	02	600	234	01
660	312	02	660	299	01
720	326	03	720	304	02
			780	304	02
			840	301	02
			900	294	02
			960	282	02
			1020	282	02
			1080	290	02
			1140	349	02
			1200	021	03
			1260	034	04
			1320	028	04
			1380	020	04
			1440	011	05
			1500	008	05
			1560	009	05

END OF DATA

TABLE 5

AIMING AND T-TIME COMPUTER MET MESSAGES
17 APRIL 1981

LC37 0530 MST	WSD 0630 MST	LC37 0730 MST
METCM1325064	METCM1325065	METCM1325064
171250124880	171350122882	171450124881
00373004 28850880	00000000 28830882	00000000 28900881
01317011 28900870	01307002 28830872	01000000 28920871
02561004 28980845	02033007 28850846	02039004 28930846
03605008 28810806	03031007 28720807	03049006 28790807
04052003 28440759	04617003 28340760	04063004 28470760
05129004 28030715	05174003 27970716	05180003 28030716
06148015 27640672	06128013 27600673	06123013 27630673
07169012 27230632	07157016 27140632	07152015 27230633
08198014 26790593	08191012 26670594	08176014 26800594
WSD 0830 MST	WSD 0930 MST	
METCM1325065	METCM1325065	
171550122883	171650122883	
00000000 29040883	00000000 29210883	
01483001 28890873	01285003 28950873	
02022005 28810847	02209001 28710847	
03056005 28440808	03134001 28500808	
04101004 28250761	04083006 28330761	
05117003 28171716	05109005 27960716	
06123011 27510673	06112012 27460673	
07151015 27110633	07132016 27010632	
08163014 26490594	08142017 26660594	

STATION ALTITUDE 4651.37 FEET MSL
 17 APR. 81 0530 HRS. MST
 ASCENSION NO. 24

SIGNIFICANT LEVEL DATA
 1070180024
 LC-37
 TABLE 6

GEODETIC COORDINATES
 32.40175 LAT UEG
 106.31232 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
880.3	4051.4	14.1	75.0
850.0	5026.6	15.6	63.0
804.6	6553.8	13.8	59.0
779.0	7447.4	12.0	60.0
719.8	9603.5	6.5	71.0
700.0	10354.7	5.0	66.0
661.8	11852.3	1.8	54.0
645.4	12515.9	.2	54.0
606.0	14163.7	-4.2	84.0
598.0	14508.0	-5.1	84.0
582.4	15189.5	-6.8	84.0
574.4	15544.3	-7.6	74.0
559.0	16237.8	-9.5	-15.6
544.0	16927.6	-10.8	-14.5
542.5	16997.4	-11.1	-12.1
536.2	17292.7	-11.1	-12.5
528.6	17653.3	-11.3	-16.0
521.0	18019.0	-11.3	-14.5
506.0	18756.3	-11.7	-16.2
500.0	19057.1	-11.6	-19.0
434.0	22572.4	-19.6	-26.3
420.2	23360.2	-21.0	-25.6
412.8	23791.7	-21.7	-20.0
400.0	24552.7	-23.5	-26.4
392.8	24989.0	-24.6	-30.1
386.4	25381.8	-25.7	-29.8
379.6	25804.6	-26.7	-30.2
366.6	26629.4	-28.7	-34.0
347.6	27876.4	-31.6	-36.7
317.2	29980.9	-37.8	-42.8
300.0	31237.2	-41.2	-46.7
282.0	32611.0	-44.7	-50.1
250.0	35225.2	-51.6	-54.0

STATION ALTITUDE 4051.37 FEET MSL
17 APR. 81 0530 HRS MST
ASCENSION NO. 24

UPPER AIR DATA
1070180024
LC-37
TABLE 7

GEODETIC COORDINATES
32°40'17.5" LAT DEG
106°31'23.2" LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CURIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	860.3	14.1	9.7	75.0	1062.1	662.0	210.0	4.1
4500.0	866.2	14.8	9.3	69.5	1042.7	662.8	242.4	1.000286
5000.0	850.8	15.6	8.6	63.3	1021.5	663.6	298.6	1.000279
5500.0	835.7	15.0	7.8	61.8	1005.3	662.9	324.5	1.000272
6000.0	820.8	14.5	6.9	60.5	989.6	662.2	334.6	1.000266
6500.0	806.2	13.9	6.0	59.1	974.2	661.5	341.5	1.000260
7000.0	791.7	12.9	5.2	59.5	960.1	660.3	352.2	1.000255
7500.0	777.5	11.9	4.4	60.3	946.4	659.0	3.2	1.000250
8000.0	763.4	10.6	3.8	62.8	933.5	657.5	19.1	1.000246
8500.0	749.5	9.3	3.2	65.4	920.8	656.0	39.7	1.000242
9000.0	735.9	8.0	2.5	67.9	908.3	654.5	69.6	1.000237
9500.0	722.5	6.8	1.8	70.5	896.0	653.0	77.7	1.000233
10000.0	709.3	5.7	.3	68.4	883.1	651.6	74.1	1.000227
10500.0	696.2	4.7	-1.3	64.8	870.3	650.3	75.6	1.000221
11000.0	683.3	3.6	-3.2	60.8	857.7	649.0	77.7	1.000215
11500.0	670.6	2.6	-5.1	56.8	845.3	647.6	80.7	13.6
12000.0	658.1	1.4	-6.8	54.0	833.0	646.2	64.6	1.000204
12500.0	645.8	.2	-8.0	54.0	821.3	644.8	88.9	15.3
13000.0	633.6	-1.1	-7.3	62.8	809.6	643.3	95.1	14.4
13500.0	621.6	-2.4	-6.8	71.9	798.0	641.7	101.8	13.5
14000.0	609.8	-3.6	-6.5	81.0	786.8	640.2	108.7	12.6
14500.0	596.2	-5.1	-7.4	84.0	775.6	638.6	114.3	12.4
15000.0	586.7	-6.3	-8.6	84.0	764.4	637.0	116.5	13.2
15500.0	575.4	-7.5	-11.1	75.2	753.3	635.5	120.4	13.7
16000.0	564.2	-8.8	-14.1	65.5	742.7	635.8	126.2	14.0
16500.0	553.2	-10.0	-15.1	65.9	731.4	632.4	132.8	13.6
17000.0	542.4	-11.1	-12.1	92.0	719.9	631.2	142.2	12.2
17500.0	531.8	-11.2	-14.4	76.9	706.3	631.0	148.0	12.3
18000.0	521.4	-11.3	-14.6	76.5	692.7	630.9	151.3	1.000165
18500.0	511.2	-11.6	-15.6	71.8	679.8	630.5	147.5	1.000161
19000.0	501.1	-11.6	-18.4	56.8	666.8	630.4	141.7	1.000156
19500.0	491.2	-12.6	-19.9	54.1	656.1	629.1	132.2	11.9
20000.0	481.4	-13.7	-21.0	54.3	645.9	627.7	116.9	10.5
20500.0	471.8	-14.9	-22.0	54.4	635.8	626.3	99.8	9.9
21000.0	464.4	-16.0	-23.0	54.6	625.9	624.9	85.9	10.1
21500.0	453.2	-17.2	-24.1	54.7	616.2	623.5	73.2	10.9
22000.0	444.1	-18.3	-25.1	54.8	606.7	622.1	66.7	10.6
22500.0	435.3	-19.4	-26.2	55.0	597.3	620.7	60.0	10.4
23000.0	426.5	-20.4	-25.9	61.0	587.3	619.6	58.6	8.5
23500.0	417.6	-21.2	-25.8	66.6	577.3	618.6	61.8	6.1

STATION ALTITUDE 4051.37 FEET MSL
 17 APR. 61 0530 HRS MST
 ASCENSION NO. 24

UPPER AIR DATA
 1070160024
 C-37
 TABLE 7 CON'T

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT DEGREES	REL.HUM. PERCENT	DENSITY METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	409.3	-22.2	-26.6	66.9	567.7	617.4	70.1	4.5	1.000131
24500.0	400.9	-23.4	-28.2	64.3	558.8	615.9	93.8	3.7	1.000128
25000.0	392.6	-24.6	-30.1	60.2	550.1	614.3	109.8	4.0	1.000126
25500.0	384.5	-26.0	-29.9	69.1	541.6	612.6	106.3	5.0	1.000124
26000.0	376.5	-27.2	-31.1	69.2	532.9	611.1	104.0	6.0	1.000122
26500.0	368.6	-28.4	-33.4	61.9	524.4	609.6	116.2	6.4	1.000119
27000.0	360.8	-29.6	-34.8	60.0	515.9	608.1	128.0	7.2	1.000117
27500.0	353.2	-30.7	-35.9	60.0	507.4	606.7	139.0	8.3	1.000115
28000.0	345.7	-32.0	-37.1	59.9	499.2	605.1	151.7	10.8	1.000113
28500.0	338.3	-33.4	-38.5	59.7	491.5	605.2	159.3	13.6	1.000111
29000.0	331.0	-34.9	-40.0	59.5	483.9	601.4	162.0	16.2	1.000109
29500.0	323.9	-36.4	-41.4	59.2	476.5	599.5	162.0	17.8	1.000107
30000.0	316.9	-37.9	-42.9	58.9	469.1	597.6	161.3	19.3	1.000105
30500.0	310.0	-39.2	-44.4	57.3	461.5	595.9	162.2	21.0	1.000104
31000.0	303.2	-40.6	-45.9	55.8	454.0	594.2	164.5	22.9	1.000102
31500.0	296.5	-41.9	-47.3	54.8	446.5	592.5	166.4	24.8	1.000100
32000.0	289.9	-43.1	-48.6	54.4	439.0	590.9	169.2	27.0	1.000098
32500.0	283.4	-44.4	-49.8	54.1	431.6	589.2	173.3	29.7	1.000097
33000.0	277.0	-45.7	-52.4	46.0**	424.3	587.5	176.7	32.5	1.000095
33500.0	270.7	-47.0	-55.7	35.6**	417.0	585.8			1.000093
34000.0	264.5	-48.4	-59.6	25.3**	409.9	584.1			1.000091
34500.0	258.5	-49.7	-64.7	15.0**	403.0	582.4			1.000090
35000.0	252.6	-51.0	-73.8	4.7**	396.1	580.6			1.000088

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.37 FEET MSL
17 APR. 01 0530 HRS MST
ASCENSION NO. 24

MANDATORY LEVELS
1070180024
LC-37
TABLE 8

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE			REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS
		AIR DEGREES	DEGREE CENTIGRADE	DEWPNT			
850.0	5023.	15.6	8.6	63.	300.0	3.0	
800.0	6707.	13.5	5.7	59.	345.5	7.3	
750.0	8490.	9.4	3.2	65.	39.0	2.2	
700.0	10344.	5.0	-0.8	66.	74.5	6.9	
650.0	12315.	0.7	-7.6	54.	86.9	15.6	
600.0	14405.	-4.9	-7.1	84.	113.9	12.3	
550.0	16628.	-10.3	-14.9	69.	135.3	13.1	
500.0	19030.	-11.6	-19.0	54.	141.1	13.1	
450.0	21651.	-17.6	-24.4	55.	71.0	10.7	
400.0	24512.	-23.5	-28.4	64.	96.1	3.6	
350.0	27665.	-31.2	-36.4	60.	144.9	9.2	
300.0	31175.	-41.2	-46.7	55.	165.4	23.8	
250.0	35148.	-51.6					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
17 APR. 1974 0630 HRS MST
ASCESSION NO. 274

SIGNIFICANT LEVEL DATA
10700-0274
WHITE SKIES
TABLE 9

UTDOLIC COORDINATES
52.40003 LAT LEG
106.37033 LONG LEG

PRESSURE GEOMETRIC MILLIBARS MSL FEET	ALTIMETER DEGREES CENTIGRANE	TEMPERATURE AIR DEPOINT DEGREES CENTIGRANE	R.H. HUM. PERCENT
682.0	3989.0	14.0	9.2
650.0	5015.7	14.5	9.2
620.2	6007.8	14.5	66.0
791.0	7011.8	12.0	57.0
752.8	8370.0	9.3	57.0
715.0	9766.3	5.7	92.0
700.0	10356.1	4.6	98.0
664.0	11545.7	2.6	50.0
651.0	12268.5	0.6	51.0
624.4	13364.5	-2.1	50.0
608.0	14057.2	-4.7	50.0
582.2	15174.5	-7.4	97.0
564.4	15967.0	-9.6	73.0
556.0	16347.7	-10.1	72.0
539.4	17114.5	-11.5	62.0
526.7	17713.6	-13.4	65.0
514.6	18297.4	-12.1	69.0
500.0	19022.5	-11.6	60.0
482.0	19943.0	-13.7	50.0
435.2	22467.3	-19.9	53.0
412.4	23775.6	-22.1	67.0
400.0	24512.2	-23.8	64.0
368.8	26446.4	-28.5	60.0
300.0	31192.3	-41.1	52.0

STATION LATITUDE 3989.00 FEET "SL
 17 APR. 61 0630 HRS MST
 ASCENSIO 1.0. 274

UPPER AIR DATA
 1n70020274
 WHITE SANDS
 TABLE 10

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF WIND KNOTS	WIND DATA DIRECTION DEGREES (IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
5989.0	882.0	14.0	73.0	1064.7	0.0	0.0	1.000291
4000.0	881.7	14.0	72.9	1064.2	19.3	0.0	1.000291
4500.0	863.9	14.2	69.5	1044.4	662.1	1.8	1.000265
5000.0	850.5	14.5	68.2	1025.0	662.3	3.5	1.000278
5500.0	835.3	14.5	72.2	1007.0	662.3	5.2	1.000271
6000.0	820.4	14.5	68.1	984.3	662.2	7.0	1.000264
6500.0	805.8	13.6	57.0	974.9	661.0	6.9	1.000258
7000.0	791.3	12.6	4.3	97.0	659.9	5.4	1.000253
7500.0	777.1	11.4	3.6	58.8	947.6	4.4	1.000248
8000.0	763.0	10.2	2.9	60.6	934.6	3.8	1.000244
8500.0	749.2	9.0	2.3	62.8	921.8	2.7	1.000240
9000.0	735.5	7.7	1.8	66.1	904.1	1.5	1.000236
9500.0	722.1	6.4	1.2	69.3	896.7	2.2	1.000232
10000.0	708.8	5.2	.2	69.8	884.0	4.5	1.000227
10500.0	695.7	4.3	-1.5	65.6	871.9	6.9	1.000221
11000.0	682.8	3.5	-3.9	58.1	857.6	10.4	1.000214
11500.0	670.1	2.7	-6.5	50.7	844.6	13.8	1.000207
12000.0	657.6	1.3	-7.8	50.6	833.0	15.1	1.000203
12500.0	645.3	0	-8.4	52.9	821.3	16.3	1.000199
13000.0	633.1	-1.2	-8.6	57.0	809.5	15.9	1.000197
13500.0	621.2	-2.6	-8.2	65.3	798.2	15.0	1.000195
14000.0	609.3	-4.5	-6.7	84.8	788.3	97.4	1.000195
14500.0	597.6	-5.8	-8.4	81.5	777.1	98.2	12.5
15000.0	586.2	-7.0	-10.6	75.2	765.8	100.0	11.7
15500.0	574.8	-8.3	-12.3	72.6	754.9	105.4	12.1
16000.0	563.7	-9.6	-13.9	71.1	744.1	109.0	12.6
16500.0	552.7	-10.4	-15.4	66.6	731.6	121.1	14.4
17000.0	541.8	-11.3	-11.8	81.6	719.6	129.7	16.7
17500.0	531.2	-12.7	-14.1	89.5	709.5	135.0	17.6
18000.0	520.7	-12.8	-14.0	90.5	695.6	141.4	18.1
18500.0	510.5	-12.0	-14.6	80.9	680.0	141.8	17.1
19000.0	500.4	-11.8	-17.8	60.9	661.3	135.0	14.7
19500.0	490.6	-12.8	-19.9	54.8	651.8	125.3	12.5
20000.0	480.9	-13.8	-22.0	50.1	645.5	127.6	11.1
20500.0	471.3	-15.1	-23.0	50.7	635.6	120.1	10.8
21000.0	461.8	-16.3	-24.0	51.3	625.9	124.0	11.3
21500.0	452.6	-17.5	-25.0	51.9	616.4	125.1	12.0
22000.0	443.5	-18.6	-26.0	52.4	607.0	121.0	12.7
22500.0	434.6	-20.0	-27.0	53.3	597.6	120.1	10.9
23000.0	425.8	-20.8	-26.7	58.7	587.4	119.1	8.0

STATION ALTITUDE 3,989.00 FEET "SL
 17 APR. 61 0630 HRS. ST
 ASCENSION NO. 274

UPPER AIR DATA
 10700-0274
 WHITE SANDS T
 TABLE 10 CON'T

UT ONE DEG COORDINATES,
 32.40043 LAT LEG
 106.37033 LONG LEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	DEWPOINT DEGREES CELSIUS	GRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TIN)	SPEED KIOTS	INDEX OF REFRACTION
23500.0	417.1	-21.6	-26.6	64.1	577.4	618.0	54.1	7.0	1.000133	
24000.0	409.6	-22.6	-27.2	66.1	567.8	618.8	60.0	5.4	1.000130	
24500.0	401.0	-23.8	-28.6	64.0	558.8	615.4	87.7	4.2	1.000129	
25000.0	391.9	-25.0	-29.7	64.5	549.8	613.9	117.0	4.1	1.000126	
25500.0	383.7	-26.2	-30.8	65.0	541.1	612.3	128.7	6.9	1.000123	
26000.0	375.8	-27.4	-31.9	65.5	532.5	610.8	135.5	9.8	1.000121	
26500.0	367.9	-28.6	-33.0	65.8	524.0	609.3	136.6	12.6	1.000119	
27000.0	360.0	-30.0	-34.5	64.4	515.6	607.6	145.7	14.0	1.000117	
27500.0	352.3	-31.3	-36.0	62.9	507.3	605.4	149.5	15.5	1.000115	
28000.0	344.7	-32.6	-37.5	61.4	499.1	604.3	154.2	17.2	1.000113	
28500.0	337.3	-34.0	-39.0	59.9	491.1	602.6	156.5	18.5	1.000111	
29000.0	330.0	-35.3	-40.5	58.5	483.2	600.9	158.6	19.8	1.000109	
29500.0	322.9	-36.6	-42.0	57.0	475.5	599.2	160.4	21.2	1.000107	
30000.0	315.0	-37.9	-43.5	55.5	467.9	597.5			1.000105	
30500.0	309.2	-39.3	-45.0	54.0	460.4	595.8			1.000103	
31000.0	302.5	-40.6	-46.5	52.6	453.1	594.1			1.000102	

STATION ALTITUDE 3,889.00 FEET MSL
 17 APR. 1 0630 HRS AST
 ASLNSIO: 1.0. <74

MANDATORY LEVELS
 10700 20274
 WHI TF SURFACE
 TABLE 11

GEODETIC COORDINATES
 32°40.04' LAT LEG
 106.37033 LON LEG

PRESSURE MILLIBARS	GLO-POTENTIAL FEET	TEMPERATURE		REL.HUM. PERCENT	WIND DIA DEGREES (TN)	WIND SPEED KNOTS
		AIR DEWPNT.	DEGREES CENTIGRAVE			
550.0	5012.	14.5	8.2	66.	19.5	5.6
600.0	6674.	13.2	4.9	57.	12.8	6.3
750.0	8464.	9.0	2.3	63.	354.0	2.8
700.0	10326.	4.6	-0.8	68.	82.7	5.9
650.0	12296.	0.5	-8.4	51.	80.5	15.8
600.0	14343.	-5.5	-8.0	83.	98.0	12.8
550.0	16601.	-10.6	-14.9	70.	125.3	14.9
500.0	18976.	-11.8	-18.0	60.	134.8	14.6
450.0	21614.	-17.9	-25.2	52.	75.4	12.1
400.0	24471.	-23.8	-28.7	64.	87.7	4.2
350.0	27622.	-31.7	-36.4	62.	151.1	16.1
300.0	31130.	-41.1	-47.1	52.		

STATION ALTITUDE 4051.37 FEET MSL
17 APR. 81 0730 HRS MST
ASCENSION NO. 25

SIGNIFICANT LEVEL DATA
1070180025
LC-37
TABLE 12

GEOGRAPHIC COORDINATES
32°40'17.5" LAT DEG
106°31'23.2" LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEMPPOINT	REL.HUM. PERCENT
881.4	4051.4	14.5	10.1	75.0
850.0	5061.3	15.1	8.8	66.0
795.6	6897.5	13.1	5.0	58.0
776.4	7571.6	11.9	3.9	58.0
700.0	10386.7	4.6	-0.4	70.0
646.8	12488.7	-3	-9.7	47.0
611.6	13952.5	-4.3	-5.3	93.0
560.4	16200.6	-9.1	-9.4	98.0
500.0	19087.1	-12.5	-15.1	81.0
464.4	20930.8	-16.2	-19.9	73.0
428.6	22905.9	-19.5	-23.6	70.0
400.0	24582.8	-23.2	-27.7	66.0
300.0	31277.3	-40.5	-47.2	48.0
281.6	32671.1	-44.0	-50.8	46.0
250.0	35274.5	-51.5		

STATION ALTITUDE 4051.37 FEET MSL
17 APR. 61 0730 HRS MST
ASCENSION NO. 25

UPPER AIR DATA
1070100025
LC-37
TABLE 13

GEOGRAPHIC COORDINATES
32°40'17.5" LAT DEG
106°31'23.2" LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CURIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	381.4	14.5	10.1	75.0	1061.8	662.5	.0	1.000293
4500.0	386.3	14.8	9.6	71.0	1043.9	662.8	26.0	1.000287
5000.0	391.9	15.1	8.9	66.5	1024.5	663.1	26.0	1.000280
5500.0	396.7	14.6	7.9	64.1	1008.0	662.5	26.0	1.000273
6000.0	402.7	14.1	6.9	61.9	992.1	661.8	26.0	1.000267
6500.0	407.1	13.5	5.9	59.7	976.5	661.1	26.0	1.000260
7000.0	412.6	12.9	4.9	58.0	961.3	660.3	29.0	1.000254
7500.0	417.4	12.0	4.0	58.0	947.1	659.2	33.6	1.000249
8000.0	424.3	10.8	3.3	59.8	934.1	657.7	41.2	1.000245
8500.0	430.3	9.5	2.6	62.0	921.4	656.2	57.8	3.1
9000.0	436.6	8.2	1.8	64.1	908.9	654.6	80.0	2.8
9500.0	452.2	6.9	1.0	66.2	896.5	653.1	81.3	4.0
10000.0	470.0	5.6	.2	68.4	884.4	651.5	77.2	5.6
10500.0	497.0	4.4	-.9	68.8	872.2	650.0	74.7	7.4
11000.0	564.0	3.5	-2.9	63.3	859.5	648.7	72.6	9.9
11500.0	671.3	2.3	-5.1	57.6	846.9	647.4	71.3	12.4
12000.0	658.6	1.3	-7.4	52.3	834.5	646.0	74.0	13.7
12500.0	646.5	.3	-9.6	47.4	822.3	644.7	78.2	14.5
13000.0	634.3	-1.3	-7.4	63.1	811.1	643.0	82.0	15.2
13500.0	622.3	-2.9	-6.0	78.8	800.2	641.2	86.9	15.0
14000.0	610.5	-4.4	-5.3	93.1	789.3	639.5	91.9	14.9
14500.0	598.7	-5.5	-6.2	94.2	777.3	638.2	96.0	14.7
15000.0	587.2	-6.5	-7.2	95.3	765.5	636.8	99.2	14.3
15500.0	575.9	-7.6	-8.1	96.4	753.8	635.5	102.5	14.0
16000.0	564.6	-6.7	-9.0	97.6	742.4	634.2	104.8	14.5
16500.0	553.8	-9.5	-9.9	96.0	730.2	633.2	106.6	15.2
17000.0	543.0	-10.0	-10.9	93.3	717.6	632.5	108.3	15.9
17500.0	532.4	-10.6	-11.9	90.3	705.2	631.8	111.1	16.5
18000.0	521.9	-11.2	-12.9	87.4	693.0	631.0	113.0	17.1
18500.0	511.7	-11.8	-13.9	84.5	681.1	630.3	112.5	16.6
19000.0	501.7	-12.4	-14.9	81.5	669.3	629.5	109.0	15.5
19500.0	491.6	-13.3	-16.1	79.2	658.5	628.4	104.2	14.5
20000.0	482.0	-14.3	-17.5	77.0	648.0	627.1	92.3	14.0
20500.0	472.5	-15.3	-18.8	74.9	637.7	625.9	80.1	14.2
21000.0	463.1	-16.3	-20.0	72.9	627.5	624.7	72.3	14.3
21500.0	453.6	-17.2	-20.9	72.1	616.9	623.6	70.1	13.6
22000.0	444.7	-18.0	-21.9	71.4	606.5	622.6	67.7	13.0
22500.0	435.7	-18.8	-22.8	70.6	596.3	621.5	74.6	11.5
23000.0	426.9	-19.7	-23.8	69.8	586.4	620.4	90.0	10.1
23500.0	418.2	-20.6	-25.0	68.6	577.0	619.1	108.4	9.7

STATION ALTITUDE 4051.37 FEET MSL
 17 APR. H1 0730 HRS MST
 ASCENSION NO. 25

UPPER AIR DATA
 1n70160025
 LC-37

TABLE 13 CON'T

GEOMETRIC ALTITUDE HSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REFL. HUM. PERCENT	DENSITY GM/CURIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	404.7	-21.9	-26.3	67.4	567.7	617.7	122.6	11.4
24500.0	401.4	-23.0	-27.5	66.2	558.7	616.3	132.1	13.7
25000.0	392.9	-24.3	-29.0	64.9	549.7	614.7	138.4	14.2
25500.0	384.5	-25.6	-30.4	63.5	540.8	613.1	141.4	14.7
26000.0	376.4	-26.9	-31.9	62.2	532.1	611.5	143.6	15.7
26500.0	368.4	-28.2	-33.3	60.8	523.6	609.9	145.6	21.2
27000.0	360.5	-29.4	-34.8	59.5	515.2	608.3	147.5	21.7
27500.0	352.9	-30.7	-36.2	58.2	507.0	606.6	149.1	22.2
28000.0	345.4	-32.0	-37.7	56.8	498.9	605.0	151.1	22.6
28500.0	338.0	-33.3	-39.1	55.5	490.9	603.4	154.3	22.8
29000.0	330.6	-34.6	-40.6	54.1	483.1	601.7	157.5	23.2
29500.0	323.6	-35.9	-42.0	52.8	475.4	600.1	160.4	23.5
30000.0	316.9	-37.2	-43.5	51.4	467.9	598.5	160.7	23.6
30500.0	310.2	-38.5	-44.9	50.1	460.4	596.8	161.0	23.8
31000.0	303.6	-39.8	-46.4	48.7	453.2	595.2	160.6	23.9
31500.0	297.0	-41.1	-47.8	47.7	445.8	593.5	158.9	24.3
32000.0	290.4	-42.3	-49.1	47.0	438.2	591.9	157.0	24.8
32500.0	284.0	-43.6	-50.4	46.2	430.9	590.3		
33000.0	277.6	-44.9	-52.8	40.2**	423.7	588.5		
33500.0	271.3	-46.4	-56.2	31.4**	416.7	586.7		
34000.0	265.1	-47.8	-60.0	22.5**	409.8	584.6		
34500.0	259.1	-49.3	-65.0	13.7**	403.1	582.9		
35000.0	253.2	-50.7	-73.3	4.9**	396.5	581.0		

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.37 FEET MSL
17 APR. 81 0730 HRS AST
ASCENSION NO. 25

MANDATORY LEVELS
1070160025
LC-37
TABLE 14

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE DEGREES	AIR DEGREES	DEMPONT CENTIGRADE	REL. HUM. PERCENT	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5058.	15.1	8.6	6.6	26.0	2.2	
800.0	6739.	13.3	5.4	59.	26.9	5.4	
750.0	8512.	9.5	2.6	62.	58.4	3.1	
700.0	10376.	4.6	-4	70.	75.4	6.9	
650.0	12345.	.6	-9.0	48.	77.0	14.2	
600.0	14431.	-5.4	-6.1	94.	95.7	14.7	
550.0	16656.	-9.7	-10.3	95.	107.1	15.4	
500.0	19060.	-12.5	-15.1	81.	108.4	15.3	
450.0	21676.	-17.5	-21.3	72.	69.2	13.4	
400.0	24542.	-23.2	-27.7	66.	133.1	14.1	
350.0	27699.	-31.2	-36.8	58.	149.6	22.4	
300.0	31215.	-40.5	-47.2	48.	159.8	24.1	
250.0	35197.	-51.5					

* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3489.00 FEET "SL
17 APR. 1968 0830 HRS AST
ASCLNSION NO. 275

SIGNIFICANT LEVEL DATA

1070020275
WHITE SANDS
TABLE 15

PRESSURE GEOMETRIC MILLIBARS MSL FEET	ALTITUDE MILLIBARS MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
682.9	3989.0	16.8	9.5	66.0
672.6	4315.7	14.0	7.5	65.0
650.0	5044.3	14.4	7.5	63.0
314.4	6230.3	13.0	6.1	55.0
700.0	10350.3	4.2	7	78.0
666.0	11676.5	1.4	-5.7	59.0
630.4	13121.6	-2.3	-8.8	61.0
604.8	14198.0	-5.7	-10.6	53.0
500.0	19040.1	-13.1	-16.1	78.0
400.0	24521.3	-23.6	-27.2	73.0
300.0	31207.6	-40.5	-45.7	57.0

STATION LATITUDE 34°49.00 FEET MSL
 17 APR. 11 0630 HRS LST
 ASCENSION, 1.0. <75

UPPER AIR DATA
 10700Z 0275
 WHITE SANDS
 TABLE 16

GEOPHYSICAL PRESSURE	TEMPERATURE	REL. HUM.	SPEED OF WIND DATA
ALITUDE MSL FEET	AIR DEGREES CENTIGRADE	PERCENT	DIRECTION DEGREES (TRUE)
millibars	DEGREES C	METER	KNOTS
3989.0	15.8	9.5	105.0 065.0 0
4000.0	15.7	9.4	29.0 29.0 0
4500.0	14.1	7.5	105.0 065.0 0
5000.0	14.4	7.5	104.5 061.5 1.2
5500.0	13.9	6.9	102.8 062.1 2.3
6000.0	13.3	6.4	101.3 061.5 3.5
6500.0	12.4	5.8	99.4 060.8 4.6
7000.0	11.4	5.2	96.5 059.8 4.9
7500.0	10.3	4.6	95.1 057.5 5.3
8000.0	9.2	3.9	93.7 057.2 5.8
8500.0	8.2	3.3	92.4 054.7 6.2
9000.0	7.1	2.6	91.0 053.4 6.7
9500.0	6.0	1.9	89.7 052.1 7.1
10000.0	4.9	1.2	88.5 050.4 7.5
10500.0	3.9	0.0	87.2 049.5 8.0
11000.0	2.8	-2.3	85.9 048.1 8.4
11500.0	1.8	-4.8	84.7 046.7 8.8
12000.0	0.6	-6.4	83.5 045.2 9.2
12500.0	0.5	-7.5	82.3 043.7 9.5
13000.0	-2.0	-8.5	81.2 042.1 9.9
13500.0	-3.5	-7.8	80.1 040.4 10.3
14000.0	-5.1	-6.9	79.0 038.6 10.7
14500.0	-6.2	-7.2	77.8 037.3 11.1
15000.0	-6.9	-8.2	76.5 036.3 11.5
15500.0	-7.7	-9.2	75.2 035.4 11.9
16000.0	-8.5	-10.2	74.0 034.4 12.3
16500.0	-9.2	-11.1	72.7 033.5 12.7
17000.0	-10.0	-12.1	71.5 032.5 13.1
17500.0	-10.7	-13.1	70.4 031.0 13.5
18000.0	-11.5	-14.1	69.2 030.0 13.9
18500.0	-12.3	-15.0	68.1 029.7 14.3
19000.0	-13.0	-16.0	66.9 028.7 14.7
19500.0	-13.0	-17.0	65.8 027.5 15.1
20000.0	-15.0	-18.1	64.6 026.3 15.5
20500.0	-15.9	-19.1	63.7 025.1 15.9
21000.0	-16.9	-20.1	62.7 023.9 16.3
21500.0	-17.9	-21.1	61.6 022.7 16.7
22000.0	-18.9	-22.1	60.6 021.5 17.1
22500.0	-19.8	-23.1	59.6 020.3 17.5
23000.0	-20.6	-24.2	58.7 019.1 17.9

GEOPHYSICAL PRESSURE	TEMPERATURE	REL. HUM.	SPEED OF WIND DATA
ALITUDE MSL FEET	AIR DEGREES CENTIGRADE	PERCENT	DIRECTION DEGREES (TRUE)
millibars	DEGREES C	METER	KNOTS
3989.0	15.8	9.5	105.0 065.0 0
4000.0	15.7	9.4	29.0 29.0 0
4500.0	14.1	7.5	104.5 061.5 1.2
5000.0	14.4	7.5	102.8 062.1 2.3
5500.0	13.9	6.9	101.3 061.5 3.5
6000.0	13.3	6.4	99.4 060.8 4.6
6500.0	12.4	5.8	97.9 059.8 4.9
7000.0	11.4	5.2	96.5 058.5 5.3
7500.0	10.3	4.6	95.1 057.5 5.8
8000.0	9.2	3.9	93.7 057.2 6.2
8500.0	8.2	3.3	92.4 054.7 6.6
9000.0	7.1	2.6	91.0 053.4 7.0
9500.0	6.0	1.9	89.7 052.1 7.4
10000.0	4.9	1.2	88.5 050.4 7.8
10500.0	3.9	0.0	87.2 049.5 8.2
11000.0	2.8	-2.3	85.9 048.1 8.6
11500.0	1.8	-4.8	84.7 046.7 9.0
12000.0	0.6	-6.4	83.5 045.2 9.4
12500.0	0.5	-7.5	82.3 043.7 9.8
13000.0	-2.0	-8.5	81.2 042.1 10.2
13500.0	-3.5	-7.8	80.1 040.4 10.6
14000.0	-5.1	-6.9	79.0 038.6 11.0
14500.0	-6.2	-7.2	77.8 037.3 11.4
15000.0	-6.9	-8.2	76.5 036.3 11.8
15500.0	-7.7	-9.2	75.2 035.4 12.2
16000.0	-8.5	-10.2	74.0 034.4 12.6
16500.0	-9.2	-11.1	72.7 033.5 13.0
17000.0	-10.0	-12.1	71.5 032.5 13.4
17500.0	-10.7	-13.1	70.4 031.0 13.8
18000.0	-11.5	-14.1	69.2 030.0 14.2
18500.0	-12.3	-15.0	68.1 029.7 14.6
19000.0	-13.0	-16.0	66.9 028.7 15.0
19500.0	-13.0	-17.0	65.8 027.5 15.4
20000.0	-15.0	-18.1	64.6 026.3 15.8
20500.0	-15.9	-19.1	63.7 025.1 16.2
21000.0	-16.9	-20.1	62.7 023.9 16.6
21500.0	-17.9	-21.1	61.6 022.7 17.0
22000.0	-18.9	-22.1	60.6 021.5 17.4
22500.0	-19.8	-23.1	59.6 020.3 17.8
23000.0	-20.6	-24.2	58.7 019.1 18.2

STATION LATITUDE 3489.00 FEET ASL
17 APR. 81 0830 HRS, EST
ASCENSION, 10. 475

PPTR AIR DATA
1n70020275
WHITE SANDS
TABLE 16 CONT

UTODGET COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	DEWPOINT CELTIGRADE	REL.HUM. PERCENT	SPEED OF WIND KNOTS	DIRECTION DEGREES (TIN)	WIND DATA KNOTS	INDEX OF REFRACTION
23500.0	417.0	-21.8	-25.2	73.9	577.5	617.9	106.6	1.000123
24000.0	405.6	-22.8	-26.2	73.6	568.1	616.6	114.6	1.000121
24500.0	400.3	-23.8	-27.2	73.0	558.9	615.4	123.4	1.000120
25000.0	391.8	-25.0	-28.6	71.9	549.8	615.9	130.6	1.000126
25500.0	385.5	-26.2	-30.0	70.7	540.8	612.5	134.0	1.000124
26000.0	379.3	-27.5	-31.3	69.5	532.0	610.7	137.3	20.0
26500.0	367.4	-28.7	-32.7	68.3	523.4	609.2	139.6	21.9
27000.0	352.5	-30.0	-34.1	67.1	514.9	607.6	141.7	22.7
27500.0	351.9	-31.2	-35.5	65.9	506.6	606.0	143.0	1.000117
28000.0	344.4	-32.5	-36.9	64.7	498.4	604.4	145.4	23.4
28500.0	337.1	-33.7	-38.2	63.5	490.3	602.9	148.4	1.000115
29000.0	329.9	-35.0	-39.6	62.3	482.4	601.3	151.0	24.2
29500.0	322.9	-36.2	-41.0	61.1	474.7	599.7	153.6	23.9
30000.0	315.0	-37.5	-42.4	59.9	467.0	598.1	1.000105	1.000107
30500.0	309.3	-38.7	-43.7	58.7	459.5	596.5	1.000103	1.000101
31000.0	302.7	-40.0	-45.1	57.5	452.2	594.9	1.000101	1.000109

STATION ALTITUDE 3489.000 FFFF SL
 17 APR. 1961 0830 IRS MST
 ASCENSIO. NO. 275

MANDATORY LEVELS
 1070020275
 WHITE SANDS
 TABLE 17

UT DDTIC COORDINATES
 32°40.043 LAT DEG
 106.37033 LOI. DEG

PRESSURE OF POTENTIAL MILLIBARS	FLEET	TEMPERATURE			REL.HUM. PERCENT	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS
		ATR DEGREES	DEWPNT CENTIGRADE	PLCNT			
850.0	5041.	14.4	7.5	65.	29.0	24	
800.0	6717.	12.0	5.5	65.	34.8	4.6	
750.0	6481.	8.2	3.3	71.	53.2	3.5	
700.0	10340.	4.2	•7	76.	65.9	2.3	
650.0	12305.	•2	-7.1	60.	79.8	14.0	
600.0	14387.	-6.0	-7.0	92.	91.6	14.0	
550.0	16611.	-9.4	-11.4	66.	115.9	12.8	
500.0	19013.	-13.1	-16.1	78.	110.8	10.8	
450.0	21624.	-18.2	-21.4	76.	98.0	22.0	
400.0	24480.	-23.8	-27.2	73.	123.6	14.9	
350.0	27632.	-31.6	-35.8	66.	144.2	23.7	
300.0	31145.	-40.5	-45.7	57.			

STATION ALTITUDE 3,989.00 FEET MSL
17 APR. 01 0930 HRS MST
ACQUISITION NO. 276

SIGNIFICANT LEVEL DATA
IN 70020276
TABLE WITH STATUS

GEODETIC COORDINATES,
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPOINT DEGREES CENTIGRADE	R-L HUM. PERCENT
3089.0	3089.0	17.4	9.1	58.0
368.0	4468.0	14.8	6.1	64.0
350.0	5049.0	13.5	7.3	66.0
338.4	5430.3	13.5	9.6	55.0
750.8	8459.0	8.0	2.2	64.0
700.0	10350.1	4.1	0.8	79.0
657.0	12001.9	0.0	-5.8	85.0
604.2	14216.5	-6.2	-7.4	91.0
569.6	15729.4	-8.3	-9.2	93.0
544.8	16865.1	-9.2	-10.3	92.0
536.4	17261.2	-9.8	-9.9	92.0
500.0	19043.3	-11.6	-14.4	81.0
400.0	24539.1	-23.6	-27.2	73.0
300.0	31225.5	-40.5	-45.2	60.0

STATION ALTITUDE 3480.00 FFFF1 "SL
 17 APR. '11 0930 HRS AST
 ASCENSION NO. 276

UPPLR AIR DATA
 1070020276
 WHITE LANDS
 TABLE 19

ULODLTIC COORDINATES
 32°40'04.3 LAT DEG
 106°37'03.3 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND KNOTS	DIRECTION DEGREES (IN) OF WIND	WIND DATA SPEED IN KNOTS	INDEX OF REFRACTION
3989.0	883.0	17.4	9.1	58.0	105.5	665.7	1.000217
4000.0	882.7	17.3	9.0	58.1	1053.3	665.0	1.000216
4500.0	861.0	14.7	8.0	64.1	1044.2	662.6	1.000212
5000.0	851.5	13.6	7.3	65.8	1029.7	661.2	1.000217
5500.0	836.3	13.4	6.6	55.2	1012.8	660.7	1.000215
6000.0	821.2	12.6	4.2	56.7	997.4	659.6	1.000211
6500.0	806.4	11.8	3.8	58.2	982.2	658.8	1.000216
7000.0	791.8	11.0	3.4	59.7	967.2	657.9	1.000212
7500.0	777.5	10.2	3.0	61.2	952.5	656.9	1.000248
8000.0	762.5	9.3	2.6	62.6	938.1	656.0	1.000244
8500.0	749.7	8.5	2.2	64.3	923.9	655.0	1.000240
9000.0	735.9	7.3	1.9	68.3	910.6	654.6	1.000237
9500.0	722.4	6.1	1.5	72.3	897.9	652.2	6.9
10000.0	709.1	4.9	1.1	76.2	885.2	650.8	7.0
10500.0	696.1	3.7	0.2	77.7	872.8	649.3	8.1
11000.0	683.1	2.5	-1.8	73.5	860.8	647.8	10.2
11500.0	670.3	1.2	-3.7	69.3	848.6	646.2	11.8
12000.0	659.8	0.0	-5.8	65.0	837.1	644.6	6.9
12500.0	649.3	-1.4	-6.0	70.8	825.4	643.0	13.1
13000.0	639.1	-2.8	-6.3	76.7	813.9	641.3	14.4
13500.0	621.0	-4.2	-6.7	82.6	802.6	639.0	72.8
14000.0	609.2	-5.6	-7.2	88.5	791.5	637.9	15.5
14500.0	597.6	-6.6	-7.8	91.4	779.3	636.7	17.0
15000.0	586.0	-7.3	-8.4	92.0	766.3	635.9	16.3
15500.0	574.7	-8.0	-9.0	92.7	753.5	635.0	15.0
16000.0	563.6	-8.5	-9.5	92.8	740.4	634.4	13.9
16500.0	552.7	-8.9	-9.9	92.3	727.2	633.9	13.6
17000.0	541.9	-9.1	-10.1	92.0	713.5	633.7	13.9
17500.0	531.4	-9.2	-10.5	90.5	699.9	633.5	14.2
18000.0	521.0	-10.0	-11.7	87.4	686.6	632.5	11.1
18500.0	510.8	-10.9	-13.0	84.4	677.4	631.4	21.8
19000.0	500.9	-11.7	-14.3	81.3	660.4	630.4	22.9
19500.0	490.8	-12.8	-15.5	80.3	650.8	629.11	1.000174
20000.0	481.0	-13.9	-16.6	79.6	645.4	627.7	23.7
20500.0	471.3	-15.0	-17.8	78.9	635.2	626.3	24.0
21000.0	461.8	-16.1	-19.0	78.2	625.1	625.11	1.000173
21500.0	452.5	-17.2	-20.1	77.4	615.2	623.0	24.1
22000.0	443.4	-16.3	-21.3	76.7	605.5	622.3	23.9
22500.0	434.5	-19.3	-22.5	76.0	595.9	620.9	23.5
23000.0	425.8	-20.4	-23.7	75.2	585.5	619.6	23.0

STATION NUMBER 3,890.00 FEET ASL
17 APR. 1930 1000 hrs LST
ASCENSION ISL. 276

UPPER AIR DATA
10700, 10270
WHITE SANDS
TABLE 19 CONT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMP. NATURE AIR CENTIGRADE	DEWPOINT AIR CENTIGRADE	REL. HUM. PERCENT	DEPSIT. MM/SEC	SPD OF WIND KNOTS	WIND DIRECTION DEGREES (TIN)	WIND VELOCITY KNOTS	INDEX OF REFRACTION:
25500.0	417.2	-21.5	-24.8	74.5	571.2	010.2	116.2	22.8	1.000155
24600.0	400.9	-22.6	-26.0	73.8	560.1	010.6	117.1	22.8	1.000151
24500.0	400.6	-23.7	-27.2	73.1	559.2	015.5	117.9	22.7	1.000149
25600.0	392.1	-25.0	-29.5	72.1	550.1	015.9	120.0	22.8	1.000126
25400.0	383.8	-26.2	-29.8	71.1	541.1	015.4	124.1	22.9	1.000124
26000.0	375.6	-27.4	-31.2	70.2	532.3	010.8	127.0	23.1	1.000121
26500.0	367.6	-28.7	-32.5	69.2	523.7	009.2	132.5	23.7	1.000119
27000.0	359.8	-29.9	-33.9	68.2	515.2	007.7	137.3	24.5	1.000117
27500.0	352.2	-31.2	-35.2	67.2	500.9	006.1	141.5	25.4	1.000115
28000.0	344.7	-32.4	-36.6	66.3	490.7	004.5	144.5	25.8	1.000113
28500.0	337.3	-33.7	-37.9	65.3	490.6	002.9	147.5	26.2	1.000111
29000.0	330.1	-34.9	-39.3	64.3	482.7	001.5	148.0	26.2	1.000109
29500.0	323.1	-36.2	-40.6	63.4	474.9	599.4	149.5	26.7	1.000107
30000.0	316.2	-37.4	-41.9	62.4	467.3	598.2	150.5	27.2	1.000105
30500.0	309.5	-38.7	-43.5	61.4	459.8	596.0	151.5	27.7	1.000103
31000.0	302.9	-39.9	-44.6	60.4	452.4	595.0	152.5	28.2	1.000102

STATION ALTITUDE 3,890.00 FEET MSL
 17 APR. 1961
 ASSEMBLY NO. 276

ATMOSPHERIC LEVELS
 16700.00276
 WHITE CANUS
 TABLE 20

ATMOSPHERIC COORDINATES,
 32°40'43" LAT DEG
 106°37'33" LONG DEG

PRESSURE ATOPOTENTIAL MILLIBARS	FLEET	DEGREES CENTIGRADE	TEMPERATURE		REL. HUM. PERCENT	DIRECTION DEGREES (TN)	WIND VELOC. KNOTS
			AIR	DEPTH			
450.0	5006.	13.5	7.3	60.	209.5	1.8	
400.0	6718.	11.4	3.7	59.	69.1	1.5	
350.0	8480.	8.5	2.2	64.	48.0	6.5	
300.0	10340.	4.1	0.6	79.	65.1	7.5	
250.0	12302.	-0.9	-5.9	69.	67.3	15.9	
200.0	14379.	-6.4	-7.6	91.	78.0	17.0	
150.0	16602.	-9.0	-10.0	94.	94.5	15.6	
100.0	19017.	-11.8	-14.4	81.	115.1	6.0	
500.0	21637.	-17.5	-20.5	77.	117.4	24.1	
450.0	24498.	-23.8	-27.2	73.	117.9	22.7	
400.0	27650.	-31.6	-35.6	67.	142.0	25.6	
350.0	31163.	-40.5	-45.2	60.			

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